

REMARKS

Claim 1 has been amended to include the recitations of claims 2 and 3, which have been canceled. Support for this amendment can also be found, for example, on page 8, lines 22-25 of Applicants' specification.

Claim 17 has been added. Support for claim 17 can be found, for example, on page 8, line 25 to page 9, line 5 of the specification.

Claim 18 has been added. Support for claim 18 can be found, for example, on page 8, line 25 to page 9, line 5.

Upon entry of the Amendment, claims 1 and 4-18 will be pending.

Claims 1-16 have been rejected for obviousness-type double patenting as allegedly being unpatentable over claims 1-14 of U.S. Patent No. 7,045,257 to Hatakeyama et al. ("Hatakeyama").

Claims 1-16 have also been provisionally rejected for obviousness-type double patenting as allegedly being unpatentable over claims 1-9 and 11-20 of co-pending U.S. Application No. 10/825,657.

Independent claim 1 has been amended to recite a colored composition containing metal microparticles, wherein the metal microparticles are silver microparticles having an average particle diameter of 60 to 250 nm. Independent claims 14 and 16 contain similar recitations in which the microparticles have an average particle diameter of 60 to 250 nm.

To establish *prima facie* obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art.

Claims 1-14 of Hatakeyama are directed to a black matrix and a method of manufacturing the black matrix. The black matrix in Hatakeyama contains metal fine particles (claim 1). As discussed in col. 3 of Hatakeyama, metal fine particles include silver particles. However, none of claims 1-14 of Hatakeyama disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm. Therefore, claims 1, 14 and 16 would not be obvious over claims 1-14 of Hatakeyama because Hatakeyama does not teach or suggest all the elements of Applicants' claimed invention.

Claims 4-12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1, and thus claims 4-12 would not be obvious over Hatakeyama for at least the same reasons that claim 1 would not be obvious over Hatakeyama. Claim 15 depends from claim 14 and would not be obvious over Hatakeyama for at least the same reasons that claim 14 would not be obvious over Hatakeyama.

Claims 1-9 and 11-20 of U.S. Appln. No. 10/825,657 are method claims directed to a method for forming a liquid crystal display in which fine particles of metal are dispersed in a binder. However, none of claims 1-9 or 11-20 of the '657 application disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm. Therefore, claims 1, 14 and 16 would not be obvious over claims 1-9 and 11-20 of U.S. Application No. 10/825,657 because U.S. Appln. No. 10/825,657 does not teach or suggest all the elements of Applicants' claimed invention.

Claims 4-12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1, and thus claims 4-12 is not obvious over U.S. Application No. 10/825,657 for

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at least the same reasons that claim 1 is not obvious over U.S. Application No. 10/825,657.

Claim 15 depends from claim 14 and is not obvious over U.S. Application No. 10/825,657 for at least the same reasons that claim 14 is not obvious over U.S. Application No. 10/825,657.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the obviousness-type double patenting rejection based on Hatakeyama and the provisional obviousness-type double patenting rejection based on U.S. Application No. 10/825,657.

Claims 1, 2, 6, 8, 10 and 12 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,686,980 to Hirayama et al. ("Hirayama").

Independent claim 1 is directed to a colored composition containing metal microparticles, wherein the metal microparticles are silver microparticles having an average particle diameter of 60 to 250 nm.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Hirayama discloses a light-shielding film that includes at least a film prepared from fine particles of metal and these particles may blacken the light-shielding film (col. 5, lines 54-65). Hirayama discloses that the fine particles for blackening may be metals such as aluminum, cadmium, cobalt, chromium, iron, etc. (col. 5, lines 54-65).

While Hirayama discloses a blackened light-shielding film comprising fine metal particles, Hirayama does not disclose or suggest a color composition containing silver microparticles having an average particle diameter of 60 to 250 nm. Therefore, Hirayama does

not anticipate claims 1 because Hirayama does not disclose each and every element in Applicants' claim 1.

Claims 6, 8, 10 and 12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1 and thus claims 6, 8, 10 and 12 are not anticipated by Hirayama for at least the same reasons that claim 1 is not anticipated by Hirayama.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the § 102 rejection based on Hirayama.

Claims 1-4, 6, 8, 10, 12, 14 and 16 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,718,992 to Sato et al. ("Sato '992").

Independent claim 1 is directed to a colored composition containing metal microparticles, wherein the metal microparticles are silver microparticles having an average particle diameter of 60 to 250 nm. Independent claims 14 and 16 contain similar recitations in which the microparticles have an average particle diameter of 60 to 250 nm.

As stated above, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

As the Examiner points out, Sato '992 discloses that a light-shielding layer is employed as a black matrix comprised of electrically conductive fine particles, such as carbon black, metal oxides, such as tin oxide, ITO, indium oxide, and metals, such as gold, platinum or silver alloys (col. 9, lines 12-49). The Examples indicate that the black-hued coating material or dark-hued coating material comprises carbon black, tin oxide, black titanium oxide or nickel (see Table 1 and Table 3).

While Sato '992 discloses a black matrix comprising metal microparticles and while Sato '992 discloses that these microparticles may be comprised of a silver alloy, Sato '992 does not disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm. Therefore, Sato '992 does not anticipate claims 1, 14 and 16 because Sato '992 does not disclose each and every element in those claims.

Claims 4, 6, 8, 10 and 12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1 and thus claims 4, 6, 8, 10 and 12 are not anticipated by Sato '992 for at least the same reasons that claim 1 is not anticipated by Sato '992.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the § 102 rejection based on Sato '992.

Claims 1-4, 6, 8, 10, 12, 14 and 16 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 08-021992 ("JP '992").

Independent claim 1 is directed to a colored composition containing metal microparticles, wherein the metal microparticles are silver microparticles having an average particle diameter of 60 to 250 nm. Independent claims 14 and 16 contain similar recitations in which the microparticles have an average particle diameter of 60 to 250 nm.

JP '992 discloses a black matrix comprising silver particles. However, the JP '992 does not disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm. Therefore, JP '992 does not anticipate claims 1, 14 and 16 because JP '992 does not disclose each and every element in those claims.

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Claims 4, 6, 8, 10 and 12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1 and thus claims 4, 6, 8, 10 and 12 are not anticipated by JP '992 at least for the same reasons that claim 1 is not anticipated by JP '992.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the § 102 rejection based on JP '992.

Claims 1, 3 and 4 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,916,487 to Weidlich et al. ("Weidlich").

Claim 1 has been amended to include the recitations of claim 2. Claim 2 has not been rejected under 35 U.S.C. § 102(b) based on Weidlich. Accordingly, claim 1, as amended, is not anticipated by Weidlich.

Claim 3 has been canceled.

Claim 4 depends from claim 1 and thus claim 4 is not anticipated by Weidlich at least by virtue of its dependency on claim 1.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the § 102 rejection based on Weidlich.

Claims 1, 2, 4, 6, 8, 10, 12 and 14 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,501,900 to Harada et al. ("Harada").

Harada discloses a black matrix substrate having a substrate, and a black pattern formed on the substrate (abstract). Harada further discloses that the black pattern includes at least metal particles in a resin pattern, which comprises resin formed in a pattern shape (abstract). While Harada discloses a substrate with fine metal particles formed thereon, Harada does not disclose

or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm (the subject matter of claim 3, which is not included in this rejection).

Claim 1 has been amended to include the recitations of claim 3. Accordingly, claim 1, as amended, is not anticipated based on Harada.

Claims 4, 6, 8, 10 and 12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1. Therefore, claims 4, 6, 8, 10 and 12 are not anticipated by Harada at least by virtue of their dependency on claim 1.

Claim 14 is directed to a method for producing a black matrix comprising preparing a colored composition using metal microparticles having an average particle diameter of 60 to 250 nm. Harada does not disclose or suggest a colored composition comprising metal microparticles having an average diameter of 60 to 250 nm. Accordingly, claim 14 is not anticipated by Harada.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 1, 2, 4, 6, 7, 10, 12, 14 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,605,900 to Ono et al. ("Ono").

Ono discloses a color filter substrate containing a transparent substrate, a black matrix and a plurality of colored layers of plural colors. The black matrix and the colored layers are formed in a predetermined pattern in a first region on the transparent substrate. A resin layer having substantially the same thickness as that of the black matrix is formed in a second peripheral region on the transparent substrate positioned peripherally adjacent to the first region

(abstract). Ono discloses that the black matrix comprises fine metal particles (col. 1, lines 47-55). However, Ono does not disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm (the subject matter of claim 3, which is not included in this rejection).

Claim 1 has been amended to include the recitations of claim 3. Accordingly, claim 1, as amended, is not anticipated based on Ono.

Claims 4, 6, 7, 10 and 12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1. Therefore, claims 4, 6, 7, 10 and 12 are not anticipated by Ono at least by virtue of their dependency on claim 1.

Claim 14 is directed to a method for producing a black matrix comprising preparing a colored composition using metal microparticles having an average particle diameter of 60 to 250 nm. Ono does not disclose or suggest a colored composition comprising metal microparticles having an average diameter of 60 to 250 nm. Accordingly, claim 14 is not anticipated by Ono.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 1, 2 and 4-15 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,057,900 to Ono et al. ("Ono") in view of U.S. Patent No. 5,622,794 to Sato et al. ("Sato '794").

As discussed above, Ono does not disclose or suggest a color composition comprising silver microparticles having an average particle diameter of 60 to 250 nm (the subject matter of claim 3, which is not included in this rejection).

Claim 1 has been amended to include the recitations of claim 3. Accordingly, claim 1, as amended, would not be obvious based on the combination of Ono and Sato '794.

Claims 4-12 depend from claim 1 or otherwise incorporate the colored composition recited in claim 1. Therefore, claims 4-12 would not be obvious based on Ono and Sato '794 at least by virtue of their dependency on claim 1.

Claim 14 is directed to a method for producing a black matrix comprising preparing a colored composition using metal microparticles having an average particle diameter of 60 to 250 nm. Neither Ono nor Sato '794 disclose or suggest a colored composition comprising metal microparticles having an average diameter of 60 to 250 nm. Accordingly, claim 14 would not be obvious based on the combination of Ono and Sato '794.

Claim 15 depends from claim 14. Therefore, claim 15 would not be obvious based on Ono and Sato '794 at least by virtue of its dependency on claim 14.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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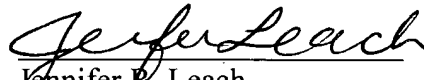
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